

**REMARKS/ARGUMENTS**

Claim 1 has been amended by this response. Claim 30 has been added. No new matter has been introduced. Support for the amended and the new claims may be found at least at ¶[0040] and ¶[0046] of the specification as published. Claims 4-7, 12-14, and 25-29 are allowed. Claims 1, 4-7, 12-14, 18-30 remain pending.

Claims 1 and 18-21 stand rejected under 35 U.S.C. §112 for allegedly failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Specifically, the Examiner identified the language “to control an optical attenuation” as lacking antecedent basis and being contradictory. Claim 1 has been amended to remove the phrase “to control an optical attenuation.”

Claim 1 stands rejected under 35 U.S.C. §103(a) for allegedly being unpatentable over Zah U.S. Patent No. 6,434,175 (hereinafter “Zah”) in view of Koch U.S. Patent No. 5,394,489 (hereinafter “Koch”). However, neither Zah nor Koch, taken individually or in combination, teach each and every element of claim 1. For example, claim 1 recites in part:

a *controller* configured to inject a dc current into the optical amplifying unit, wherein  
the optical amplifying unit amplifies in a high gain light input from the optical transmission path, and the optical element is operative to produce gain sufficiently high that insertion loss of the optical module is completely compensated when the *controller injects the dc current more than a predetermined dc current in a forward direction*.  
(Emphasis added).

Illustrative embodiments of the claimed controller are shown, for example, in Figure 2, and disclosed in ¶[0040] and ¶[0046]. Neither Zah nor Koch teach the claimed controller.

Zah is silent about a controller configured to inject a dc current into the optical amplifier and a controller is not represented in Figure 2. (See e.g., Zah Figure 2 and col. 7, lines 17-34). Likewise, Koch is silent about a controller configured to inject a dc current into the optical amplifier and a controller is not represented in Figures 1 and 3. (See e.g., Koch Figures 1 and 3, col. 2, lines 32-68, and col. 3, lines 39-45). Hence, neither Zach nor Koch teach directly or indirectly the claimed “*controller* configured to inject a dc current into the optical amplifying unit . . . insertion loss of the optical module is completely compensated when the *controller*

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injects the dc current more than a predetermined dc current in a forward direction.” (Emphasis added).

Therefore, claim 1 should be allowed.

Dependent claims 18-21 and 30 depend from claim 1 and should be allowed for at least the same reasons as claim 1 and for the additional limitations they recite.

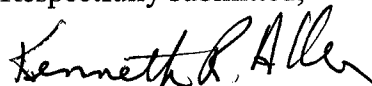
Claims 22-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected species, there being no allowable generic or linking claim (i.e., claim 18). (August 6, 2008 Office Action). Claims 22-24 should now be reinstated, because it is believed that claim 18 should be allowed.

#### CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and an action to that end is respectfully requested.

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (650) 326-2400.

Respectfully submitted,



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